

WHAT IS CLAIMED IS:

1. A method of minimizing visual artifacts resulting from a laser scan process in an electrophotographic machine, said electrophotographic machine including a photoconductive device having an image forming surface, said method comprising the steps of:
 - 5 obtaining correction data relative to a bowed image; and
offsetting at least a portion of non-bowed image data dependent upon said correction data, and additionally dependent upon halftone cell growth of a halftone cell.
2. The method of claim 1, wherein said halftone cell growth includes an order in which pels are assigned within a halftone cell.
3. The method of claim 1, wherein said halftone cell is a matrix of pels.
4. The method of claim 1, wherein said non-bowed image data is uncorrected image data.
5. The method of claim 1, wherein each said halftone cell includes a plurality of pels, at least some of said plurality of pels being arranged along at least one boundary of a corresponding one of said halftone cells.
6. The method of claim 5, wherein said plurality of halftone cells include a first halftone cell and a second halftone cell, said at least one boundary of said first halftone cell proximally aligning with said at least one boundary of said second halftone cell, thereby forming an adjacent boundary, said offsetting step not being
5 executed relative to any pels arranged along said adjacent boundary.
7. The method of claim 1, wherein said offsetting step includes forming bowed image data as a result of said offsetting step.
8. The method of claim 7, further comprising the step of sending said bowed image data to a laser printhead.

9. The method of claim 1, further comprising the step of accelerating a pel shift to a prior halftone cell in a scan direction of said laser beam.

10. The method of claim 9, wherein said pel shift occurs proximate to the center of said halftone cell.

11. The method of claim 1, further comprising the step of delaying a pel shift to a subsequent halftone cell in a scan direction of said laser beam.

12. An electrophotographic machine having a process direction, comprising:
a photoconductive device having an image forming surface;
a printhead unit for directing a laser beam, said printhead unit including optics
for scanning said laser beam to form a plurality of scan lines extending across said
5 photoconductive drum in a scan direction which traverses said process direction; and
a controller electrically coupled to said printhead unit for controlling a shifting
of at least one pel in a process direction, dependent on a location of said at least one
pel in said scan direction and further dependent upon a position of said at least one pel
in a halftone cell.

13. The electrophotographic machine of claim 12, wherein said controller accesses correction information to define said location.

14. The electrophotographic machine of claim 13, wherein said controller shifts an other pel prior to said location in said scan direction.

15. The electrophotographic machine of claim 13, wherein said controller shifts an other pel subsequent to said location in said scan direction.

16. The electrophotographic machine of claim 12, wherein said controller changes said location if said at least one pel is on a border of said halftone cell.

17. The electrophotographic machine of claim 12, wherein said controller changes said location to a pel that is one of at a center of said halftone cell in said scan direction and proximate to said center of said halftone cell in said scan direction.

18. A method of shifting a scan line of a laser in an electrophotographic machine, said electrophotographic machine including a photoconductive device having an image forming surface with a process direction, said method comprising the steps of:

- 5 receiving non-bowed data;
- shifting of at least one pel of said non-bowed data in a process direction, dependent on a location of said at least one pel in a scan direction that traverses said process direction, and further dependent upon a position of said at least one pel in a halftone cell; and
- 10 outputting said at least one pel as a part of the scan line.

19. The method of claim 18, wherein said halftone cell is a matrix of pels.

20. The method of claim 18, wherein said non-bowed data is uncorrected image data.

21. The method of claim 18, further comprising the step of accessing correction information to define said location.

22. The method of claim 21, further comprising the step of shifting an other pel prior to said location in said scan direction.

23. The method of claim 21, further comprising the step of shifting an other pel subsequent to said location in said scan direction.

24. The method of claim 18, further comprising the step of changing said location if said at least one pel is on a border of said halftone cell.

2002-0356.02

25. The method of claim 18, further comprising the step of changing said location to a pel that is one of at a center of said halftone cell in said scan direction and proximate to said center of said halftone cell in said scan direction.